

ABSTRACT

A nonaqueous electrolyte which contains an ionic
 5 liquid having general formula (1) below and a melting point
 not higher than 50°C, a compound which reductively decomposes
 at a more noble potential than the ionic liquid, and a
 lithium salt.



10 In formula (1), R¹ to R⁴ are each independently an alkyl
 group of 1 to 5 carbons or an alkoxyalkyl group of the
 formula R'-O-(CH₂)_n- (R' being methyl or ethyl, and the
 letter n being an integer from 1 to 4), and any two from
 among R¹, R², R³ and R⁴ may together form a ring, with the
 15 proviso that at least one of R¹ to R⁴ is an alkoxyalkyl group
 of the above formula. X is a nitrogen atom or a phosphorus
 atom, and Y is a monovalent anion.